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10/799,645	03/15/2004	Masayuki Yamada	00862.023518.	8043

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EXAMINER	
COLUCCI, MICHAEL C	
ART UNIT	PAPER NUMBER
2626	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/799,645	YAMADA ET AL.	
	Examiner	Art Unit	
	MICHAEL C. COLUCCI	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 6-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 6-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/05/2009 has been entered.

Response to Arguments

2. Applicant's arguments filed 01/05/2009 have been fully considered but they are not persuasive. Examiner has addressed the newly amended claim limitations relative to claims 1, 13, and 14, and maintains the previously cited art of Shizuka and King with respect to said amended limitations. Examiner maintains that the combined teaching of Shizuka and King are both within the scope of the present invention relative to speech output through user interaction, wherein Shizuka in view of King clearly teaches and suggests the use of a device that verbally outputs information to aid for example a visually impaired individual as is explicitly taught by King and is directly within the scope of the present invention (present invention spec. pages 2, 3, and 17). Further, the use of “motion” is merely construed as the operation a user is performing, wherein King clearly demonstrates the description an executed step by a user i.e. “motion” (though the term *motion* is not used). This teaches is also explicitly taught by King and is

directly in parallel to the teaching of the present invention regarding motion (present invention spec. page 10, motion phonetically output after execution of a button being pressed). Examiner maintains arguments as previously cited:

King teaches an assistive technology application 212 that produces speech information corresponding to the screen image information. In the embodiment of FIG. 2, the speech information conveys human speech which verbally describes general attributes (e.g., color, shape, size, and the like) of the screen image and any objects (e.g., menus, dialog boxes, icons, text, and the like) within the screen image, and also includes semantic information conveying the meaning, significance, or intended purpose of each of the objects within the screen image. The speech information may include, for example, text-to-speech (TTS) commands and/or audio output signals. Suitable assistive technology applications are known and commercially available.) The assistive technology application 212 provides the speech information to a speech application program interface (API) 214. The speech application program interface (API) 214 provides a standard means of accessing routines and services within an operating system of the server 102 (King Col. 5 lines 45-65 & Fig. 2).

Further, King teaches that the console access application 202 of the client 104A are configured to cooperate such that the user of the client 104A is able to interact with the server 102 as if the user were operating the server 102 locally. As shown in FIG. 2, the client 104A includes an input device 220. The input device 220 may be for example, a keyboard, a mouse, or a voice recognition system. When the user of the client 104A

activates the input device 220 (e.g., presses a keyboard key, moves a mouse, or activates a mouse button), the input device 220 produces one or more input signals (i.e., "input signals"), and provides the input signals to the distributed console access application 202. The distributed console access application 202 transmits the input signals to the distributed console access application 200 of the server 102. (King Col. 6 lines 41-56).

Furthermore, King teaches that when the user of the client 104A is visually impaired, the user may not be able to see the screen image displayed on the display screen 210 of the client 104A. However, when the audio output device 230 produces the verbal description of the screen image, the visually-impaired user may hear the description, and understand not only the general appearance of the screen image and any objects within the screen image (e.g., color, shape, size, and the like), but also the meaning, significance, or intended purpose of any objects within the screen image as well (e.g., menus, dialog boxes, icons, and the like). This ability for a visually-impaired user to hear the verbal description of the screen image and to know the meaning, significance, or intended purpose of any objects within the screen image allows the user of the client 104A to interact with the objects in a proper, meaningful, and expected way. (King Col. 7 lines 49-64).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 1, 6-8, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuka et al. US 20020184004 A1 (hereinafter Shizuka) King et al. US 7103551 B2 (hereinafter King).

Re claims 1 and 13-15, Shizuka teaches a control method for an apparatus that includes a help button, an execution button and a third button, wherein the help button is for setting a help mode or setting a normal mode by canceling the help mode as a state of the apparatus ([0231], user selects from a OK button, cancel button, help button, new voice button, etc.), the method comprising:

a state determination step of determining whether [[a]] the state of the apparatus is [[a]] the normal mode or [[a]] the help mode

a button determination step of determining which of the help button, the execution button and the third button is selected ([0231], user selects from a OK button, cancel button, help button, new voice button, etc.);

a setting step of setting the state of the apparatus in the help mode, in a case where it is determined in said state determination step that the state of the apparatus is

the normal mode and it is determined in said button determination step that the help button is selected ([0240], a help window will be present when in help mode);

a first execution step of executing a motion corresponding to a button determined in said button determination step ([0240], a help window will be present when in help mode, Fig. 24 shows *normal* mode when no help window is present), in a case where it is determined in said state determination step that the state of the apparatus is the normal mode and it is determined in said button determination step that the execution button or the third button is selected ([0231], user selects from a OK button, cancel button, help button, new voice button, etc.)

a cancellation step of canceling the help mode of the apparatus, in a case where it is determined in said state determination step that the state of the apparatus is the help mode and it is determined in said button determination step that the help button is selected ([0231], user selects from a OK button, cancel button, help button, new voice button, etc., canceling help mode will revert back to *normal* mode);

an output-storage step of phonetically outputting a description of a motion corresponding to the third button and storing the motion corresponding to the third button ([0231], user selects from a OK button, cancel button, help button, new voice button, etc.)

in a storage device, in a case where it is determined in said state determination step that the state of the apparatus is the help mode and it is determined in said button determination step that the third button is selected ([0231], user selects from multiplicity of button such as a OK button, cancel button, help button, new voice button, etc.); and

a second execution step of executing the motion stored in the storage device, in a case where it is determined in said state determination step that the state of the apparatus is the help mode and it is determined in said button determination step that the execution button is selected ([0231], user selects from multiplicity of button such as a OK button, cancel button, help button, new voice button, etc., wherein OK is merely an *execution* action/motion).

However, Shizuka fails to teach phonetically outputting a description of a motion

King teaches an assistive technology application 212 that produces speech information corresponding to the screen image information. In the embodiment of FIG. 2, the speech information conveys human speech which verbally describes general attributes (e.g., color, shape, size, and the like) of the screen image and any objects (e.g., menus, dialog boxes, icons, text, and the like) within the screen image, and also includes semantic information conveying the meaning, significance, or intended purpose of each of the objects within the screen image. The speech information may include, for example, text-to-speech (TTS) commands and/or audio output signals. Suitable assistive technology applications are known and commercially available.) The assistive technology application 212 provides the speech information to a speech application program interface (API) 214. The speech application program interface (API) 214 provides a standard means of accessing routines and services within an operating system of the server 102 (King Col. 5 lines 45-65 & Fig. 2).

Further, King teaches that the console access application 202 of the client 104A are configured to cooperate such that the user of the client 104A is able to interact with the server 102 as if the user were operating the server 102 locally. As shown in FIG. 2, the client 104A includes an input device 220. The input device 220 may be for example, a keyboard, a mouse, or a voice recognition system. When the user of the client 104A activates the input device 220 (e.g., presses a keyboard key, moves a mouse, or activates a mouse button), the input device 220 produces one or more input signals (i.e., "input signals"), and provides the input signals to the distributed console access application 202. The distributed console access application 202 transmits the input signals to the distributed console access application 200 of the server 102. (King Col. 6 lines 41-56).

Furthermore, King teaches that when the user of the client 104A is visually impaired, the user may not be able to see the screen image displayed on the display screen 210 of the client 104A. However, when the audio output device 230 produces the verbal description of the screen image, the visually-impaired user may hear the description, and understand not only the general appearance of the screen image and any objects within the screen image (e.g., color, shape, size, and the like), but also the meaning, significance, or intended purpose of any objects within the screen image as well (e.g., menus, dialog boxes, icons, and the like). This ability for a visually-impaired user to hear the verbal description of the screen image and to know the meaning, significance, or intended purpose of any objects within the screen image allows the user

of the client 104A to interact with the objects in a proper, meaningful, and expected way. (King Col. 7 lines 49-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shizuka to incorporate phonetically outputting a description of a motion as taught by King to allow for a system that can detect state changes and output the changes verbally to a user, wherein a description is transmitted to notify a user what is happening in a speech synthesis system through a verbal description that is clear enough where someone who is visually impaired can function as effectively as someone without impairment, where an audio help mode state is indicated to be turned off or on depending on the mode selected by a user where he/she will know if they are in help mode or not (King Col. 7 lines 49-64).

Re claim 6, Shizuka teaches the method according to claim 1, further comprising a termination step of terminating audio output being currently outputted in a case where operation performed on the apparatus is detected (Fig. 34 items S48 and S49).

Re claim 7, Shizuka teaches the method according to claim 1, further comprising a second audio output step of phonetically outputting a motion result in said second execution step ([0305] – [0306]).

Re claim 8, Shizuka teaches the method according to claim 1, further comprising:

an acquisition step of acquiring a name of a motion ([0231], user selects from multiplicity of button such as a OK button, cancel button, help button, new voice button, etc., wherein OK is merely an *execution* action/motion) corresponding to the third button, in a case where it is determined in said state determination step that the state of the apparatus is the help mode and it is determined in said button determination step that the third button is selected; an ([0225]);

However, a second audio output step of phonetically outputting the name before phonetically outputting the description of the motion in said output storage step (King Col. 7 lines 49-64);

King teaches an assistive technology application 212 that produces speech information corresponding to the screen image information. In the embodiment of FIG. 2, the speech information conveys human speech which verbally describes general attributes (e.g., color, shape, size, and the like) of the screen image and any objects (e.g., menus, dialog boxes, icons, text, and the like) within the screen image, and also includes semantic information conveying the meaning, significance, or intended purpose of each of the objects within the screen image. The speech information may include, for example, text-to-speech (TTS) commands and/or audio output signals. Suitable assistive technology applications are known and commercially available.) The assistive technology application 212 provides the speech information to a speech application program interface (API) 214. The speech application program interface (API) 214 provides a standard means of accessing routines and services within an operating system of the server 102 (King Col. 5 lines 45-65 & Fig. 2).

Further, King teaches that the console access application 202 of the client 104A are configured to cooperate such that the user of the client 104A is able to interact with the server 102 as if the user were operating the server 102 locally. As shown in FIG. 2, the client 104A includes an input device 220. The input device 220 may be for example, a keyboard, a mouse, or a voice recognition system. When the user of the client 104A activates the input device 220 (e.g., presses a keyboard key, moves a mouse, or activates a mouse button), the input device 220 produces one or more input signals (i.e., "input signals"), and provides the input signals to the distributed console access application 202. The distributed console access application 202 transmits the input signals to the distributed console access application 200 of the server 102. (King Col. 6 lines 41-56).

Furthermore, King teaches that when the user of the client 104A is visually impaired, the user may not be able to see the screen image displayed on the display screen 210 of the client 104A. However, when the audio output device 230 produces the verbal description of the screen image, the visually-impaired user may hear the description, and understand not only the general appearance of the screen image and any objects within the screen image (e.g., color, shape, size, and the like), but also the meaning, significance, or intended purpose of any objects within the screen image as well (e.g., menus, dialog boxes, icons, and the like). This ability for a visually-impaired user to hear the verbal description of the screen image and to know the meaning, significance, or intended purpose of any objects within the screen image allows the user

of the client 104A to interact with the objects in a proper, meaningful, and expected way. (King Col. 7 lines 49-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shizuka to incorporate outputting a description of the motion corresponding to the operation in a case where the state of the apparatus is the help mode and a description of the motion corresponding to the operation in a case where it is determined in said execution determination step that the operation detected in said operation detection step does not designate the execution of motion as taught by King to allow for a system that can detect state changes and output the changes verbally to a user, wherein a description is transmitted to notify a user what is happening in a speech synthesis system through a verbal description that is clear enough where someone who is visually impaired can function as effectively as someone without impairment, where an audio help mode state is indicated to be turned off or on depending on the mode selected by a user where he/she will know if they are in help mode or not (King Col. 7 lines 49-64).

5. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuka et al. US 20020184004 A1 (hereinafter Shizuka) King et al. US 7103551 B2 (hereinafter King) and further in view of Surace et al. US 6334103 B1 (hereinafter Surace).

Re claim 9, Shizuka teaches the method according to claim 1, further comprising:

a changing step of changing sound quality of output speech (Fig. 24)

However, Shizuka in view of King fails to teach a determination step of determining whether or not one same operation has been repeatedly performed on the apparatus (Surace Col. 10 lines 22-30);

from the speech outputted last, in a case where it is determined in said determination step one same operation has been repeatedly performed (Surace Col. 10 lines 22-30).

Surace teaches a voice user interface with personality, wherein it is determined whether the user is requiring repeated help in the same session or across sessions (i.e., a user is requiring help more than once in the current session).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shizuka in view of King to incorporate changing sound quality after determining whether or not the same operation has been repeatedly performed as taught by Surace to allow for a voice quality adjustment to be implemented such as a personality of a user interface dependent on how many times an operation is repeated (based on social and psychological experimental data) (Surace Col. 10 lines 22-30).

Re claim 10, Shizuka teaches the method according to claim 9, wherein in said changing step, vocalize speed of the output speech is changed (Fig. 24).

Re claim 11, Shizuka in view of King fails to teach the method according to claim 9, wherein in said changing step, volume of the output speech is changed (Surace Col. 22 lines 44-49).

Surace teaches the editing of audio tapes of the recorded scripts (e.g., to adjust volume and ensure smooth audio transitions within dialogs).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shizuka in view of King to incorporate changing the volume of the output speech as taught by Surace to allow for a voice quality adjustment to be implemented such as a personality of a user interface dependent on how many times an operation is repeated (based on social and psychological experimental data). Various parameters such as pitch, speed, clarity, and intonation can be varied to alter the personality of a voice interface (Surace Col. 22 lines 44-49).

Re claim 12, Shizuka teaches the method according to claim 9, wherein in said changing step, vocal quality of the output speech is changed (Fig. 24).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Colucci whose telephone number is (571)-270-1847. The examiner can normally be reached on 9:30 am - 6:00 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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